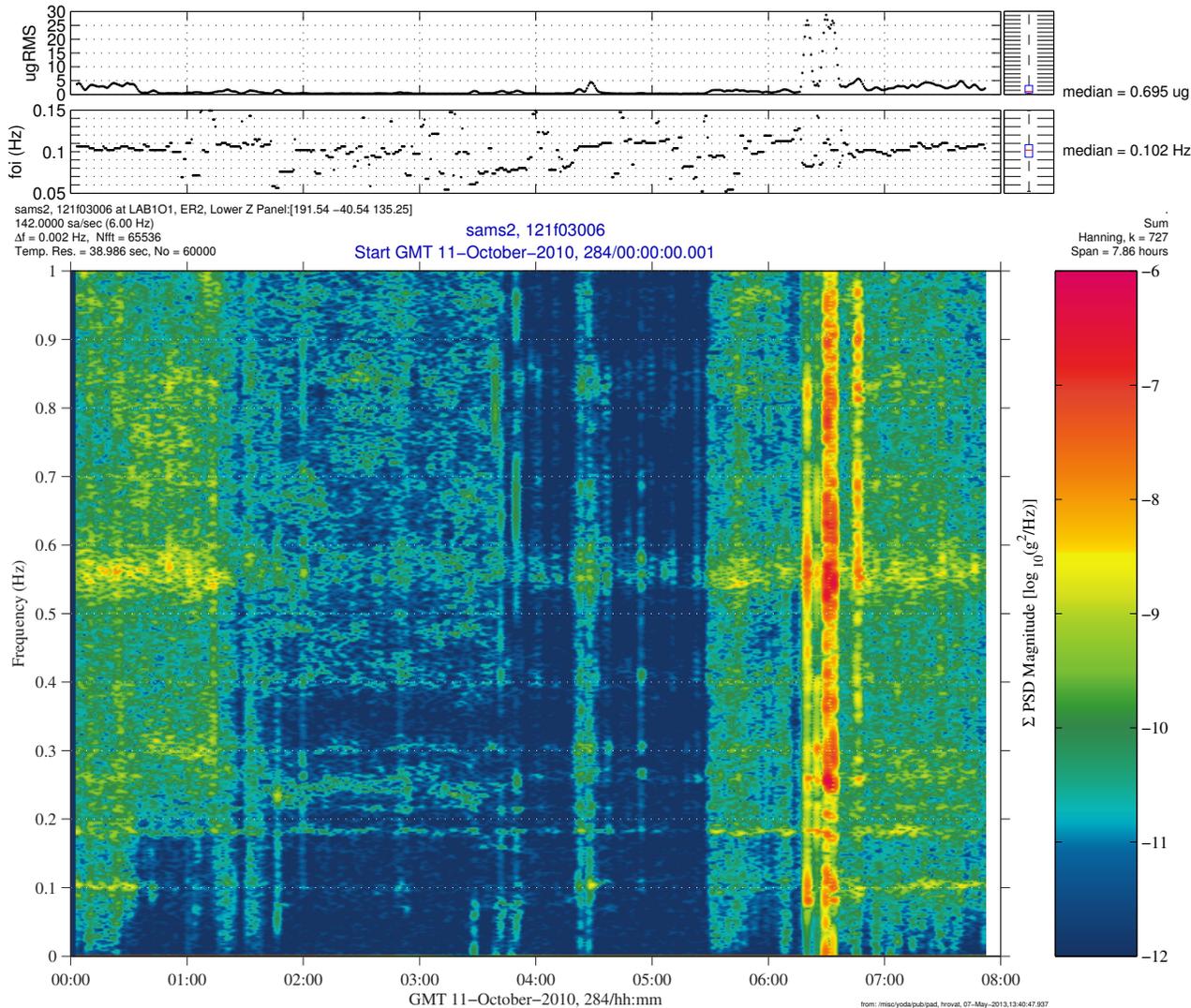


## Dedicated Thruster Firings (DTF), DTF S4-1A Qualify



Description	
Sensor	121f03 (low-pass filtered) 142 sa/sec (6 Hz)
Location	LAB1O1, ER2, Lower Z Panel
Plot Type	spectrogram ( $\Sigma$ ); $f < 1$ Hz

### Notes:

- A set of dedicated thruster firings (DTFs) was performed for on-orbit modal testing. The related modal analysis, model validation and measurement correlation was performed for the ISS Stage ULF4, DTF S4-1A, on GMT 11-Oct-2010, two pulsed starting at 284/06:23 and separated by 300s of free drift. The objective of this analysis was to validate and correlate analytical models and to verify the ISS critical interface dynamic loads and ultimately to improve fatigue life prediction for the space station.
- This spectrogram shows the transient impact of the DTF event as a orange-to-red vertical streak at GMT 06:23. Note the subsequent elevated “mode one” structural excitation at about 0.08 Hz.

Regime:	Vibratory
Category:	Vehicle
Source:	Dedicated Thruster Firings

